

IN THE SPECIFICATION

Please replace paragraph 0001 and its title as follows:

FIELD OF THE INVENTION

[0001] The present invention relates to the field of pressure sensors and the field of fabricating pressure sensors. The present invention also relates to the field of integrating pressure sensors with other devices and systems.

RELATED APPLICATIONS

[0001] The present application is a continuation of, and claims priority from, U.S. Patent Application No. 10/120,944, filed April 10, 2002, which application is incorporated herein by reference in its entirety.

Please amend the title of paragraph 0002 as follows:

BACKGROUND OF THE INVENTION

Please amend paragraph 0002 as follows:

[0002] Conventional pressure sensors are used in a wide variety of applications to monitor or control pressure in devices or systems where maintaining a particular pressure is important. However, conventional pressure sensors are relatively large.

Please amend the title of paragraph 0004 as follows:

~~SUMMARY OF THE INVENTION~~

Please amend the title of paragraph 0014 as follows:

~~DETAILED DESCRIPTION OF THE INVENTION~~

Please amend paragraph 0022 as follows:

[0022] A second silicon membrane (102), which is preferably thicker and less flexible than the thin membrane (101), is formed adjacent to the thin membrane (101) outside the reference cavity (103). The two membranes (101, 102) and the walls defining the reference cavity (103) are supported between [[and]] an upper substrate (104) and a lower substrate (105). A bonding layer (106) secures the membranes (101, 102) between the upper (104) and lower (105) substrates.

Please amend paragraph 0035 as follows:

[0035] As shown in Fig. 3[[.]], a MEMS (130), or a number of MEMS (130) formed on a single die (131), may required require an input, such as air, a gas or liquid, that is under pressure. Consequently, Fig. 3 illustrates a MEMS (130) that uses five different pressurized inputs (132a-132e).

Please amend paragraph 0054 as follows:

This is just one example of a possible process that can be used to fabricate a vertical pressure sensor [[of]] according to principles of the present invention. Other

processes will be apparent to those skilled the in art with the benefit of this disclosure. Such fabrication processes may or may not include integrating the pressure sensor with an ARS, MEMS or other device. The bottom line is that the vertical pressure sensor of the present invention can be integrated into many different MEMS, ARS or other designs much better than existing pressure sensors due to its small size requirements and the fact that it can be constructed in a silicon substrate from or on which many other types of devices can also be constructed.